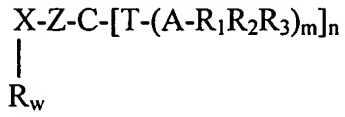
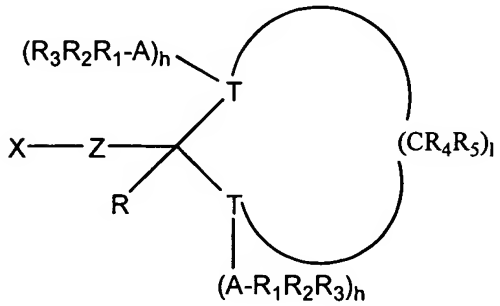
CLAIMS

That which is claimed is:

1. A compound useful as an electrophile comprising the formula:



or



wherein:

each X is independently halogen;

each Z is independently a branched or straight chain hydrocarbon connecting group which contains 1-25 carbon atoms, optionally substituted with aryl or substituted aryl;

each T is independently selected from the group consisting of oxygen, sulfur, nitrogen, and mixtures thereof;

$(A\text{-}R_1R_2R_3)$ is a protecting group, in which each A is independently an element selected from Group IVa of the Periodic Table of the Elements; and R_1, R_2, and R_3 are each independently selected from the group consisting of hydrogen, alkyl, substituted alkyl, aryl, substituted aryl, cycloalkyl, and substituted cycloalkyl;

R, R_4, and R_5 are each independently selected from the group consisting of hydrogen, alkyl, substituted alkyl, aryl, substituted aryl, cycloalkyl, and substituted cycloalkyl;

h is 0 when T is oxygen or sulfur, and 1 when T is nitrogen;

l is an integer from 1 to 7;

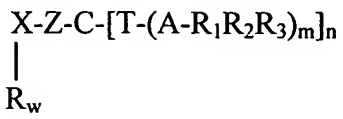
m is 1 when T is oxygen or sulfur, and 2 when T is nitrogen;

n is 2 or 3; and

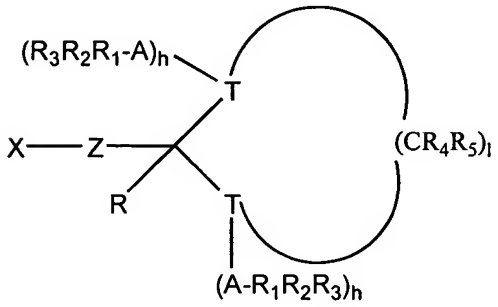
w is 0 or 1,

with the proviso that each T in structure (I) is not oxygen.

2. The compound of Claim 1, wherein said compound is



3. The compound of Claim 1, wherein said compound is



4. The compound of Claim 2, wherein each T is oxygen.

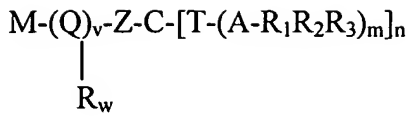
5. The compound of Claim 1, wherein each A is carbon.

6. The compound of Claim 1, wherein w is 1 and R is hydrogen.

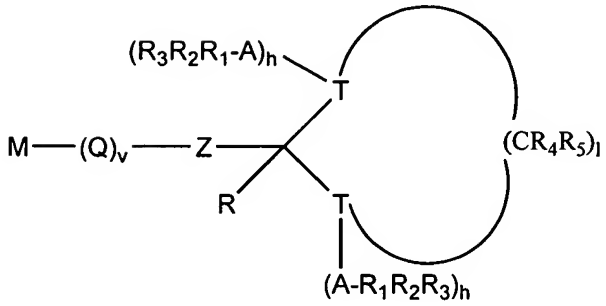
7. The compound of Claim 1, wherein w is 1 and R is alkyl or substituted alkyl.

8. The compound of Claim 1, wherein w is 0.

9. A hydrocarbon composition comprising at least one compound of the formula:



or



wherein:

each M is independently an alkali metal;

each Z is independently a branched or straight chain hydrocarbon connecting group which contains 3-25 carbon atoms, optionally substituted with aryl or substituted aryl;

each Q is independently a saturated or unsaturated hydrocarbyl group derived by incorporation of one or more compounds selected from the group consisting of conjugated diene hydrocarbons, alkenylsubstituted aromatic compounds, and mixtures thereof;

each v independently ranges from 0 to 5;

each T is independently selected from the group consisting of oxygen, sulfur, nitrogen, and mixtures thereof;

(A - $R_1R_2R_3$) is a protecting group, in which each A is independently an element selected from Group IVa of the Periodic Table of the Elements; and R_1, R_2, and R_3 are each independently selected from the group consisting of hydrogen, alkyl, substituted alkyl, aryl, substituted aryl, cycloalkyl, and substituted cycloalkyl;

R, R_4, and R_5 are each independently selected from the group consisting of hydrogen, alkyl, substituted alkyl, aryl, substituted, cycloalkyl, and substituted cycloalkyl;

h is 0 when T is oxygen or sulfur, and 1 when T is nitrogen;

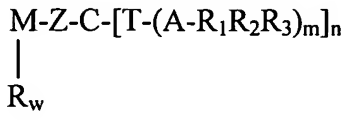
l is an integer from 1 to 7;

m is 1 when T is oxygen or sulfur, and 2 when T is nitrogen;

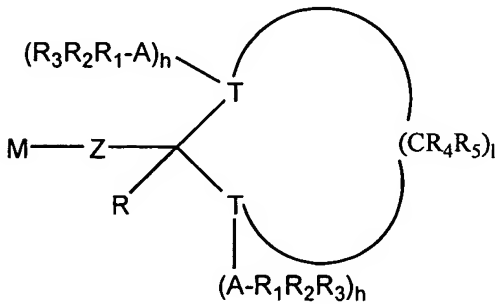
n is 2 or 3; and

w is 0 or 1.

10. The composition of Claim 9, wherein said compound is



11. The composition of Claim 9, wherein said compound is



12. The composition of Claim 9, wherein each T is oxygen.

13. The composition of Claim 9, wherein each A is carbon.

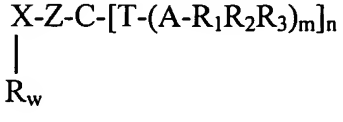
14. The composition of Claim 9, wherein w is 1 and R is hydrogen.

15. The composition of Claim 9, wherein w is 1 and R is alkyl or substituted alkyl.

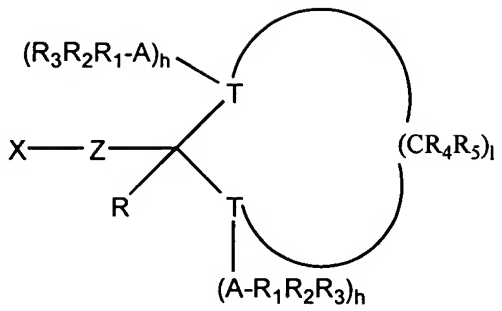
16. The composition of Claim 9, wherein w is zero.

17. A process for preparing compounds useful as polymerization initiators, comprising:

conducting a metal halogen exchange reaction on one or more compounds of the formula



or



wherein:

each X is independently halogen;

each Z is independently a branched or straight chain hydrocarbon connecting group which contains 1-25 carbon atoms, optionally substituted with aryl or substituted aryl;

each T is independently selected from the group consisting of oxygen, sulfur, nitrogen, and mixtures thereof;

$(A\text{-}R_1R_2R_3)$ is a protecting group, in which each A is independently an element selected from Group IVa of the Periodic Table of the Elements; and R_1, R_2, and R_3 are each independently selected from the group consisting of hydrogen, alkyl, substituted alkyl, aryl, substituted aryl, cycloalkyl, and substituted cycloalkyl;

R, R_4, and R_5 are each independently selected from the group consisting of hydrogen, alkyl, substituted alkyl, aryl, substituted aryl, cycloalkyl, and substituted cycloalkyl;

h is 0 when T is oxygen or sulfur, and 1 when T is nitrogen;

l is an integer from 1 to 7;

m is 1 when T is oxygen or sulfur, and 2 when T is nitrogen;

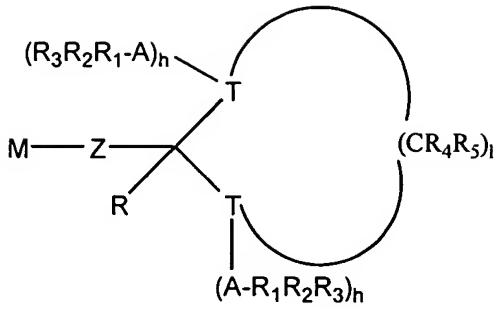
n is 2 or 3; and

w is 0 or 1,

with an alkali metal in an inert hydrocarbon solvent to form one or more compounds

$$\begin{array}{l} M\text{-}Z\text{-}C\text{-}[T\text{-}(A\text{-}R_1R_2R_3)_m]_n \\ | \\ R_w \end{array}$$

or



wherein each M is independently an alkali metal; and

optionally adding one or more compounds selected from the group consisting of conjugated diene hydrocarbons, alkenylsubstituted aromatic compounds containing 8-25 carbon atoms, and mixtures thereof to form a group (Q)v into the M-Z linkage, wherein each Q is independently a saturated or unsaturated hydrocarbyl group derived by incorporation of one or more compounds selected from the group consisting of conjugated diene hydrocarbons, alkenylsubstituted aromatic compounds, and mixtures thereof; and each v independently ranges from 0 to 5.